

2016-1911

IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

IPVENTURE, INC.,
Appellant,

v.

FEDEX CORPORATION,
Appellee.

Appeal from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in Case No. IPR2014-00833.

BRIEF FOR APPELLEE FEDEX CORPORATION

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CERTIFICATE OF INTEREST

Counsel for the Appellee FedEx Corporation certifies the following (use "None" is applicable; use extra sheets if necessary):

1. Full name of Party represented by me:

FedEx Corporation

2. Name of Real Party in interest represented by me is:

Not applicable

3. Parent corporations and any publicly held companies that own 10 percent or more of the stock in the party:

FedEx Corporation

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

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STATEMENT OF RELATED CASES

Appellant IpVenture, Inc. (“IpVenture”) asserted the patent in this appeal, U.S. Patent No. 8,725,165 (“the ’165 patent”), in *IpVenture, Inc. v. FedEx Corporation et al.*, No. 4:14-cv-04894 (N.D. Cal.) (Hamilton, P.). That district court action is stayed pending final resolution of *Inter Partes* Review No. IPR2014-00833, where the Patent Trial and Appeal Board (Board) cancelled all claims of the ’165 patent, and from which IpVenture brought this appeal.

IpVenture also asserted a related patent, U.S. Patent No. 7,212,829 (“the ’829 patent”) in *IpVenture, Inc. v. FedEx Corporation et al.*, No. 4:11-cv-05367 (N.D. Cal.) (Hamilton, P.). That district court action is stayed pending final resolution of an *inter partes* reexamination proceeding (Control No. 95/001,896), where the Board cancelled all claims of the ’829 patent, which IpVenture also appealed to this court (Appeal No. 16-2139). Briefing in Appeal No. 16-2139 is currently stayed.

I. COUNTERSTATEMENT OF THE ISSUES

1. Whether the Court should reverse the Board's finding that *Richards* discloses a "wireless tracking device," applying IpVenture's asserted claim construction, when nothing in the claim itself compels a conclusion that the recited wireless tracking device must be limited to a single physical unit as IpVenture claims, FedEx produced substantial evidence supporting the Board's finding, including unrebutted expert testimony, and IpVenture was unable to identify any supporting evidence in the specification for such a limitation and failed to offer supporting expert testimony.

2. Whether the Court should reverse the Board's finding that *Richards* discloses "an individual package that is portable by a person" by adopting IpVenture's unsupported construction to exclude all packages that could not be "carried by a person," where IpVenture failed to present any evidence that a skilled artisan would interpret "portable by a person" to exclude use of mechanical assistance in moving a package, failed to identify any intrinsic evidence supporting its proposed construction, and failed to identify any support in the specification discussing package size limitations, and where the Board's

finding was based on un rebutted expert testimony that the broadest reasonable interpretation of the phrase “portable by a person” does not exclude the use of mechanical assistance.

3. Whether the Court should reverse the Board’s Final Written Decision, which was properly premised on the Board’s application of the broadest reasonable interpretation standard for claim construction found in an agency regulation that Congress authorized the United States Patent and Trademark Office to promulgate without limitation, based solely on IpVenture’s incorrect assumption that 35 U.S.C. § 282 and the presumption of validity applies to *inter partes* review proceedings.

II. STATEMENT OF THE CASE

U.S. Patent No. 8,725,165 (“the ’165 patent”) is directed to monitoring the status of packages sent from a shipper to a recipient. Appx458, Abstract; Appx474, 2:48-56. The ’165 patent includes 4 independent claims, 30 claims total, reciting methods and systems for tracking the shipment of packages. Appx 475, 4:54-64; Appx476, 5:15-35; Appx482-483.

Upon petition by FedEx Corporation (“FedEx”), the Board instituted *inter partes* review of all 30 claims of the ’165 patent on various anticipation and obviousness grounds—ultimately finding every challenged claim unpatentable. In the instant appeal, IpVenture challenges the Board’s Final Written Decision with respect to only three of the ’165 patent independent claims—claims 1, 13, and 30—as well as one dependent claim—claim 23.

The Board instituted review of independent claims 1, 13, and 30 as anticipated by U.S. Patent Publication No. 2002/0000916 to Richards (“*Richards*”), and adopted IpVenture’s proposed claim construction for “wireless tracking device” in its Institution Decision. Appx216; Appx231. IpVenture’s Patent Owner Response—like its appeal brief—

attempted to distinguish independent claims 1, 13, and 30 from the prior art based on an argument that the prior art fails to disclose a “wireless tracking device” where all components are contained in a single physical unit. Appx292-293. The Board’s Final Written Decision rejected IpVenture’s arguments, finding that “nothing in the claim language itself compels a conclusion that the recited wireless tracking device must be a single physical unit,” and that IpVenture had provided no supporting evidence for reading such a limitation into the claims. Appx9-10. Using IpVenture’s claim construction of “wireless tracking device,” the Board found *Richards* discloses each and every element of independent claims 1, 13, and 30, and that finding is supported by substantial evidence.

The Board instituted review of dependent claim 23 as obvious over *Richards* in view of U.S. Patent No. 6,847,892 to Zhou et al. (“*Zhou*”). Dependent claim 23 indirectly depends from independent claim 13 and recites the additional limitation of “wherein the package is an individual package that is portable by a person.” The Board construed this phrase to mean: “an individual package that is capable of being moved by a person.” Appx221. IpVenture’s Patent Owner Response—

like its appeal brief—argued that the broadest reasonable interpretation of “an individual package that is portable by a person” requires limiting “portable by a person” to exclude all forms of mechanical assistance and eliminate packages larger than an unspecified size. Appx25, Appx315. The Board’s Final Written Decision rejected IpVenture’s construction as overly narrow under the broadest reasonable interpretation, finding the intrinsic record does not support reading such a limitation into the term “portable by a person.” Appx26. Using the correct claim construction, and relying on unrebutted expert testimony, the Board found that “an individual package that is capable of being moved by a person” encompasses *Richards’* disclosure of cargo such as “a refrigerator or a number of smaller items on a pallet or in a crate.” *Id.* That finding is also supported by substantial evidence.

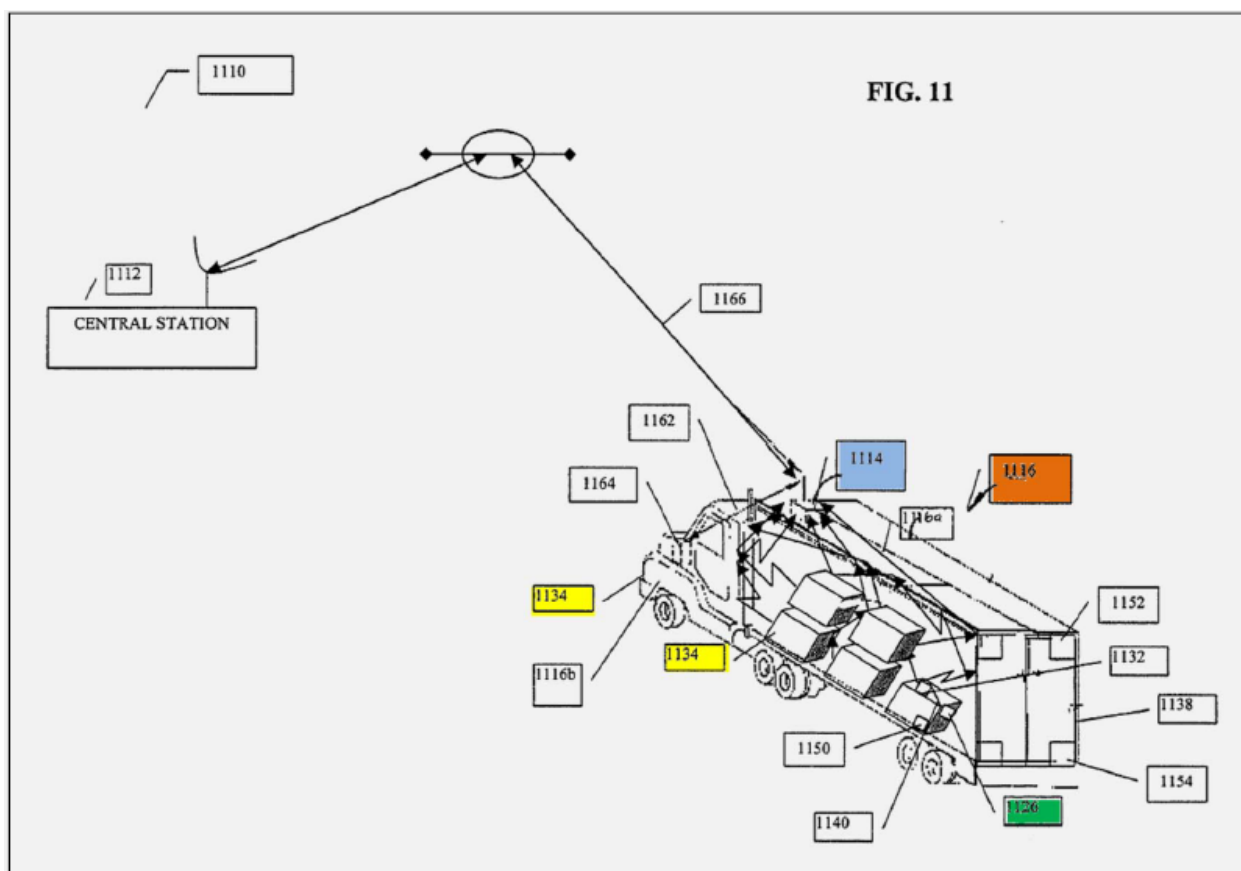
After the Board issued its Final Written Decision, which held every challenged claim unpatentable as either anticipated or obvious, IpVenture repeated its earlier arguments in a Request for Rehearing. *See* Appx426-449. The Board confirmed its findings in its Decision on Rehearing, Appx29-39, and IpVenture filed the instant appeal.

III. STATEMENT OF THE FACTS

A. Package Tracking Was Known Many Years Prior to the Filing of the '165 Patent

1. *Richards*

Richards discloses a system for tracking shipment of packages, such as the cargo shown in Figure 11 below (Appx1119):



Richards discloses, among other things, a “plurality of cargo 1134” loaded into structure 1116. Appx1119; Appx1142, ¶ [0136]. Individual cargo can include larger items, such as a refrigerator, or a number of smaller items on a pallet or in a crate. Appx1142, ¶ [0129]. As shown,

Richards also identifies structure 1116 as cargo 1134. Appx1119.

Richards discloses sensors 1126 can be attached to cargo 1134, such as the cargo 1134 within structure 1116. Appx1136, ¶ [0052], Appx1141-1142, ¶¶ [0128]-[0129], [0136]. Similarly, monitor 1114 can be attached to or within structure 1116, an example of cargo 1134. Appx1119; Appx1141-1142, ¶¶ [0128]-[0129].

“The sensors 1126 can be designed to monitor any type of status,” such as, for example, “the temperature of the cargo 1134.” Appx1142, ¶ [0129]. The sensors can also be used to track a variety of status information, such as “humidity, physical presence, volume, radio activity or any other required parameters.” Appx1135, ¶ [0020].

Richards discloses that sensors 1126 provide this status information to monitor 1114, which itself may include a “position-determining means,” such as a GPS receiver. Appx1135, ¶ [0023]; Appx1141-1144, ¶¶ [0128]-[0129], [0136], [0143]; Appx1454-1461 ¶¶ 43–53.

Monitor 1114 communicates wirelessly with central station 1112, such as via satellite or cellular communications, to report the monitored position and status information of the cargo. *See, e.g.*, Appx1141-1145, ¶¶ [0128], [0129], [0136], [0144], [0150].

2. *Zhou*

Zhou discloses a system in which “position and sensor data [is collected] via one or more remote localization and sensing devices (each a ‘Device’) 100.” Appx1210, 2:39-41. The system described in *Zhou* is then able to “make[] such Device position and sensor data available to one or more end users 25.” Appx1210, 2:43-44. The system described in *Zhou* may be used for a variety of applications, including applications for “monitoring . . . packages shipped between locations.” Appx1228, 38:7-8. With respect to the devices 100, *Zhou* discloses that each device can include a “remote sensing unit” that can be “placed inside the steel walls of a cargo container to gather environmental information on the cargo while [a] unit with [a] wireless interface and [a] GPS receiver 250 can be placed outside the container for superior signal performance.” Appx1213, 7:38-47. The GPS and environmental data are wirelessly transmitted from device 100 to ASP 200 using a transceiver. Appx1213, 8:1-24.

B. U.S. Patent No. 8,725,165

The ’165 is directed to “monitoring status of articles being shipped.” Appx474, Abstract; *see also* Appx474, 2:48-56. The ’165 patent

discloses an “article shipment notification system 100 [that] includes a shipper 102 and a recipient 104.” Appx475, 4:54-55. The ’165 patent discloses that a “tracking device (TD1) 106 is provided within or attached to the article being shipped.” Appx475-476, 4:65–5:1. “While an article is being shipped from the shipper 102 to the recipient 104,” the tracking device “gathers status information associated with the article,” which includes “at least position (location) information and/or shipping conditions information.” Appx476, 5:15-19.

The ’165 patent discloses that the “shipping conditions information pertains to conditions of or surrounding an article during its shipment.” Appx476, 5:24-26. The ’165 patent discloses that “position information provided by the GPS information [can be converted] into map coordinates, street addresses, etc.” Appx480, 13:21-24. The ’165 patent discloses that the status information may then be sent to a “tracking server 114 via [a] wireless network 110 and the Internet 112.” Appx476, 5:36-39.

The Board found independent claim 13 illustrative of the challenged claims. Appx4-5. Claim 13 recites:

13. A method for tracking shipment of packages using wireless tracking devices provided within or affixed to the respective packages, the method comprising:

accessing status information pertaining to a wireless tracking device used to track shipment of a package, the status information including at least position information and shipping condition information;

transforming the position information into a point of interest pertaining to the wireless tracking device based on at least information stored in a database;

determining if a shipping condition violation has occurred during shipment of the package based on at least the shipping condition information and at least one shipping condition level;

sending an electronic notification regarding the shipping condition violation to an interested person if it is determined that the shipping condition violation has occurred during shipment; and

facilitating network-based access to enable interested persons to receive at least a portion of the status information regarding the package, including at least the point of interest transformed from the position information.

Appx482, 13:17-38.

IV. SUMMARY OF THE ARGUMENT

Claims 1-30 of the '165 patent are unpatentable because they are anticipated or obvious over the prior art. In the instant appeal, IpVenture has not raised any issues concerning the limitations recited in independent claim 29. The Court should therefore summarily affirm the Board's Final Written Decision holding claim 29 unpatentable under 35 U.S.C. § 102(b). IpVenture also raises no separate issues in this appeal concerning the limitations of dependent claims 2-12, which depend directly or indirectly from claim 1, or claims 14-22 and 24-28, which depend directly or indirectly from claim 13. Instead, IpVenture challenges the Board's Final Written Decision with respect to the three remaining independent claims of the '165 patent—claims 1, 13, and 30—and dependent claim 23. IpVenture's arguments on appeal—which mirror its arguments presented during *inter partes* review of the '165 patent, down to the same argument headings—were all fully considered and correctly rejected by the Board. Accordingly, the Board's Final Written Decision should be affirmed.

For example, the Board properly rejected IpVenture's arguments that *Richards* must disclose a “wireless tracking device” where all

components are contained in a single physical unit in order to anticipate claims 1, 13, and 30. As the Board observed, “nothing in the claim language itself compels a conclusion that the recited wireless tracking device must be a single physical unit.” Appx9. Moreover, as the Board further noted, IpVenture provided no supporting evidence, either in the specification of the ’165 patent or from expert testimony, for reading a single physical unit limitation into the claims. Appx9; Appx35 n. 5.

And while IpVenture repeatedly suggests that the Court should review *de novo* the Board’s construction of “wireless tracking device,” the Board’s claim construction is not at issue. Indeed, IpVenture cannot justifiably argue that the Board erred in its construction of “wireless tracking device” because the Board adopted IpVenture’s proposed construction in its Institution Decision, over the objection of FedEx, and applied IpVenture’s construction throughout the proceeding. Appx216. The Board’s repeated explanations to IpVenture as to how monitor 1114 and sensor 1116 of *Richards* disclose the claimed wireless tracking device, and where these explanations are found in the Petition, make clear that substantial evidence supports the Board’s conclusion that *Richards* anticipates claims 1, 13, and 30.

The Board also properly rejected IpVenture's claim construction for the phrase "an individual package that is portable by a person," as recited by dependent claim 23. IpVenture's construction requiring that "portable by a person" exclude all forms of mechanical assistance finds no support in the intrinsic record and overly narrows the claim. Appx26. Using the correct claim construction, and relying on unrebutted expert testimony, the Board found *Richards'* disclosure of cargo, such as "a refrigerator or a number of smaller items on a pallet or in a crate," teaches an individual package that is portable by a person. *Id.* That factual finding is also supported by substantial evidence. Thus, the Board properly construed "portable by a person" under the broadest reasonable construction in light of the '165 patent specification. Appx12-13.

Further, IpVenture's attempts to extend its single physical unit argument into the obviousness analysis for dependent claim 23 fail for similar reasons. Because none of the claims include a single physical unit requirement, *Richards* need not disclose both monitor 1114 and sensor 1126 within or affixed to the same package to disclose the subject matter of dependent claim 23. Thus, the Board correctly found

that monitor 1114 and sensors 1126 of *Richards* together disclose a “wireless tracking device” that is “within or affixed” to a package that is “portable by a person.” Appx35, Appx225-226.

Moreover, while IpVenture suggests that *Zhou* is inconsequential to the Board’s finding claim 23 unpatentable, Br. 8, 15 n. 1, that is not the case. Because the ground of unpatentability in question is obviousness, the relevant inquiry is not, as IpVenture advocates, whether the exact embodiment disclosed expressly in *Richards* satisfies the limitations of claim 23. Rather, the proper inquiry is whether the combination of *Richards* and *Zhou* teaches or suggests to a person of ordinary skill a wireless tracking device within or affixed to a package that is portable by a person, taking into account the inferences and creative steps that such an artisan would employ. As the Board correctly determined, the *Richards* and *Zhou* combination teaches or suggests to a person of ordinary skill a wireless tracking device within or affixed to a package that is portable by a person.

Finally, IpVenture’s allegation that the Board should not apply the broadest reasonable interpretation standard when construing claims of issued patents is both untimely and without merit. The Court

should reject IpVenture's argument because IpVenture waived any right to make this argument by not raising it before the Board, the presumption of validity under 35 U.S.C. § 282 does not apply here, and, even if the presumption did apply, the Board properly rejected IpVenture's proposed construction of the only disputed term. For these reasons, the Board's Final Written Decision should be affirmed.

V. ARGUMENT

A. Standard of Review

The Court reviews the Board's conclusions of law without deference and its findings of fact for substantial evidence. *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015).

"[A]nticipation is a question of fact, including whether an element is inherent in the prior art." *In re Gleave*, 560 F.3d 1331, 1334–35 (Fed. Cir. 2009). "[A] claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference." *Celeritas Techs., Ltd. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998). The "elements must be arranged or combined in the same way as in the claim," but "the reference need not satisfy an *ipsissimis verbis*

test.” *In re Gleave*, 560 F.3d at 1334 (internal citations and quotation marks omitted).

A claim is obvious if the subject matter of the claim would have been obvious to a person of ordinary skill in the field of the invention. *In re Mettke*, 570 F.3d 1356, 1358 (Fed. Cir. 2009). Obviousness is a legal conclusion based on underlying findings of fact. *Id.* at 1358. The Board’s ultimate determination of obviousness is reviewed without deference, *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000), but underlying factual findings are reviewed for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

B. The Board Correctly Concluded that Claims 1, 13, and 30 Are Unpatentable as Anticipated by *Richards*, Rejecting IpVenture’s Argument That the “Wireless Tracking Device” Must Comprise a Single Physical Unit

The Board found claims 1, 13, and 30 unpatentable as anticipated under 35 U.S.C. § 102(b) by *Richards*. In response, IpVenture substantively advances only a single argument: that *Richards* cannot disclose the claimed “wireless tracking device” because monitor 1114 and sensor 1126 do not constitute a “single physical unit.” The Board

rejected this argument throughout the proceeding below, and the Court should reject the argument now.

1. IpVenture Does Not Challenge the Board's Construction of "Wireless Tracking Device," But Instead Disputes the Board's Application of the Construction

IpVenture states the standard of review for claim construction, Br. 14-16, but goes on to argue only that the Board misapplied its construction of "wireless tracking device." Br. 16-24. By challenging the application of the construction, however, IpVenture concedes that the construction itself was correct. Indeed, IpVenture cannot justifiably argue that the Board erred in its construction of "wireless tracking device" because the Board adopted IpVenture's proposed construction in its Institution Decision, over the objection of FedEx, and applied IpVenture's construction throughout the proceeding. Appx216 ("Accordingly, we adopt IpVenture's proposed construction and construe 'wireless tracking device' as 'a device that is capable of monitoring both position and shipping conditions, and capable of wirelessly communicating with another device.'"); Appx10 (confirming the same construction of "wireless tracking device" in the Final Written Decision).

Therefore, while IpVenture repeatedly suggests that this Court should review *de novo* the Board’s finding that claims 1, 13, and 30 are disclosed by *Richards* though an allegation that the Board relied on “unreasonably broad claim constructions” for “wireless tracking device,” the Board’s claim construction is not truly at issue in IpVenture’s arguments. Rather, IpVenture disagrees with the Board’s application of IpVenture’s “wireless tracking device” construction in finding claims 1, 13, and 30 anticipated by *Richards*. Thus, the Board’s finding in this regard is properly reviewed for substantial evidence. *In re Gleave*, 560 F.3d at 1334–35 (“[A]nticipation is a question of fact, including whether an element is inherent in the prior art.”); *Microsoft*, 789 F.3d at 1297 (the Court reviews the Board’s findings of fact for substantial evidence). As discussed below, substantial evidence supports the Board’s determination that *Richards* discloses the “wireless tracking device” of claims 1, 13, and 30.

2. The Board Properly Applied BRI to Reject IpVenture’s Single Physical Device Arguments

The Board properly rejected IpVenture’s arguments that *Richards* must disclose a “wireless tracking device” where all components are contained in a single physical unit in order to anticipate claims 1, 13,

and 30. As the Board observed, “nothing in the claim language itself compels a conclusion that the recited wireless tracking device must be a single physical unit.” Appx9. Moreover, as the Board further noted, IpVenture provided no supporting evidence, either in the specification of the ’165 patent or from expert testimony, for reading a single physical unit limitation into the claims. Appx9; Appx35 n. 5.

In contrast, FedEx explained that adding a single physical unit requirement to “wireless tracking device” would improperly exclude disclosed embodiments of the ’165 patent from the broadest reasonable interpretation. Appx344 (explaining that the ’165 patent [Appx476] at col. 5, ll. 7-8 envisions using multiple, physically separate devices to track an article in configurations not considered “typical”). Moreover, because the claims do not limit “wireless tracking device” to a single physical unit, “we have no call to require something more from the anticipating reference.” *In re Gleave*, 560 F.3d at 1336.

Accordingly, substantial evidence supports the Board’s rejection of IpVenture’s argument that, in order to anticipate claims 1, 13, and 30, *Richards* must disclose a “wireless tracking device” where all

components are contained in a single physical unit. Therefore, the Court should reject IpVenture’s single physical unit argument.

a. Substantial Evidence Supports the Board’s Finding that Monitor 1114 and Sensor 1126 of *Richards* Together Disclose the Claimed Wireless Tracking Device

Similarly, substantial evidence supports the Board’s conclusion that *Richards* anticipates claims 1, 13, and 30 and discloses the claimed wireless tracking device—i.e., “a device that is capable of monitoring both position and shipping conditions, and capable of wirelessly communicating with another device.” Appx216; Appx222-225; Appx10; Appx19-20. For example, *Richards* discloses “monitoring systems and associated methods for monitoring the location and/or status of assets, objects, people and animals.” Appx1134, ¶ [0003]. Specifically, *Richards* discloses that sensors 1126 monitor the status of cargo (e.g., environmental/shipping condition information), monitor 1114 monitors for this status information from sensors 1126, and monitor 1114 includes a “position-determining means,” such as a GPS receiver, that monitors for location. *See, e.g.*, Appx1135, ¶ [0023]; Appx1141-1144, ¶¶ [0128]-[0129], [0136], [0143]; Appx1454-1461 ¶¶ 43–53. Monitor 1114 also communicates wirelessly with central station 1112,

such as via satellite or cellular communications, to report the position and status information. *See, e.g.*, Appx1141-1145, ¶¶ [0128], [0129], [0136], [0144], [0150]; Appx1456, ¶ 45. In the Institution Decision, the Board recognized that “FedEx contends these aspects of Richards disclose the “wireless tracking device” limitations of independent claims 1, 13, and 30,” and the Board agreed. Appx223-224.

Nonetheless, IpVenture argues that the Board erred based on an allegation that “[t]he Petition and its supporting Declaration asserted that the sensor 1126 of *Richards* was a wireless tracking device and also alternatively asserted that the asset monitor 1114 of *Richards* was a wireless tracking device.” Br. 17 (emphasis original). In other words, IpVenture argues that the Petition supports an argument that monitor 1114 and sensor 1126 of *Richards* individually disclose a wireless tracking device, but that the Petition does not support an argument that monitor 1114 and sensor 1126 together disclose a wireless tracking device. The Board, however, twice considered and rejected this argument, explaining that “IpVenture’s characterization of the Petition is simply inaccurate.” Appx32. Instead, the Board confirmed “the Petition explained sufficiently FedEx’s arguments that monitor 1114

and sensors 1126, each individually *and* both together, disclose a wireless tracking device.” Appx16 n. 7 (emphasis original).

As the Board observed, FedEx explained in its Petition that monitor 1114 and sensor 1126 of *Richards* together disclosed the “wireless tracking device” recited by claims 1, 13, and 30. Appx16, n. 7; Appx31. For example, the Petition provided a claim chart for each of claims 1, 13, and 30 mapping both monitor 1114 and sensors 1126 to the claimed “wireless tracking device.” Appx92-93, Appx97-98, Appx105-107. Moreover, after IpVenture argued on rehearing below that claim charts including quotes from, and citations to, the asserted art was not enough, the Board further explained to IpVenture that “the Petition includes a narrative explanation (in addition to the quotes and claim charts) regarding monitor 1114 and sensors 1126 of *Richards*, and how their disclosed functions teach the required characteristics of the recited ‘wireless tracking device.’” Appx32 (citing the Petition at Appx110-112). For example, the Petition provided:

The “monitor 1114” may include, for example, a “position determining means,” which may include “a GPS receiver for receiving location data from a plurality of GPS satellites from which the present position of the structure can be determined.” *Id.*, [0023] and [0143]. As depicted, for example, ... the “sensors 1126” wirelessly transmit the monitored data

(e.g. the temperature data) to the “monitor 1114,” which wirelessly transmits the monitored data and location data to a database of “central station 1112.”

Appx110 (citing Appx1135, ¶ [0023], Appx1143-1144 ¶ [0143].

The Board’s repeated explanations to IpVenture how monitor 1114 and sensor 1126 of *Richards* disclose the claimed wireless tracking device, and where these arguments are found in the Petition, make clear that substantial evidence supports the Board’s conclusion that *Richards* anticipates claims 1, 13, and 30.

b. Substantial Evidence Supports the Board’s Finding that *Richards* Discloses a “Device Capable of Monitoring Both Position and Shipping Conditions”

While the broadest reasonable interpretation of “wireless tracking device” does not require a single physical unit, IpVenture attempts to extend its failed argument by alleging that *Richards’* monitor 1114 and sensors 1126, taken individually, cannot monitor both position information and shipping condition information. Br. 18-20. Thus, the Court should reject this argument out of hand. Substantial evidence supports the Board’s determination that monitor 1114 and sensor 1126 together monitor both position information and shipping condition information. *See, e.g.*, Appx16-17. Moreover, IpVenture’s allegation that

monitor 1114 and sensors 1126 are not individually “capable of monitoring both position and shipping conditions” is also wrong. *See* Appx92-93, Appx97-99, Appx105-107, Appx110-112.

**i. Monitor 1114 and Sensors 1126 of *Richards*
Monitor Position and Shipping Information**

Substantial evidence supports the Board’s conclusion that *Richards* discloses a “wireless tracking device” that is “capable of monitoring both position and shipping conditions.” IpVenture does not contest that monitor 1114 determines position information, or that sensors 1126 determine shipping condition information. Br. 18. Instead, IpVenture continues to pursue its single physical unit argument by alleging that *Richards* cannot disclose “a device capable of monitoring both position and shipping conditions” because monitor 1114 and sensors 1126 are physically separate devices. *Id.* at 18-19. As with its general single physical unit argument, the Board considered and rejected this line of argument, and the Board’s determination is supported by substantial evidence. Appx16-17.

As discussed above, the broadest reasonable interpretation of “wireless tracking device” is not limited to devices where all components are contained in a single physical unit. Nothing in the claim language

or specification mandates this physical limitation. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1382 (Fed. Cir. 2001) (affirming summary judgment of anticipation after rejecting patentee's argument that claims must be narrowly construed in district court to preserve validity, where the embodiment described in the specification and relied upon by patentee for the narrower construction was not required by the claims). Thus, the Board found monitor 1114 and sensors 1126 comprise “a device capable of monitoring both position and shipping information” because “[a]s FedEx asserts, Richards discloses that monitor 1114 works in conjunction with sensors 1126, which are affixed to cargo 1134, to monitor position information and environmental/shipping conditions information, such as temperature.” Appx17 (citing Appx1141-1143, ¶¶ 128–29, 143; Appx1119).

Moreover, monitor 1114 and sensors 1126 are arranged just as the “wireless tracking device” of claims 1, 13, and 30, comprising parts entirely consistent with those disclosed by the ’165 patent (i.e., GPS receivers and condition sensors) and operating together in the same way claimed to achieve the same results. *Id.* Relying on FedEx’s expert, the Board confirmed the monitor 1114 and sensors 1126 arrangement of

Richards matches that of the wireless tracking device by finding anticipation. Appx16-17 (citing Appx1455-1457 ¶¶ 44-46). Moreover, based on the matching arrangement, a person of ordinary skill would “at once envisage” monitor 1114 and sensors 1126 as a single physical unit. *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015) (“[A] reference can anticipate a claim even if it ‘d[oes] not expressly spell out’ all the limitations arranged or combined as in the claim, if a person of skill in the art, reading the reference, would ‘at once envisage’ the claimed arrangement or combination”) (quoting *In re Petering*, 49 CCPA 993, 301 F.2d 676, 681 (1962)); *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1341 (Fed. Cir. 2016).

Again, while IpVenture continues to disagree with the Board’s application of the broadest reasonable interpretation to find *Richards* anticipates claims 1, 13, and 30, substantial evidence supports the Board’s determination.

ii. Monitor 1114 and Sensors 1126 Individually Monitor Both Position and Shipping Condition Information

Moreover, IpVenture’s allegation that monitor 1114 and sensors 1126 are not individually “capable of monitoring both position and shipping conditions” is also wrong. Br. 18-19. Tellingly, IpVenture

fails to provide a single citation to *Richards* for the proposition that monitor 1114 cannot monitor shipping condition information and sensors 1126 cannot monitor position information. In contrast, FedEx explained in its Petition that *Richards* discloses monitor 1114 receives sensor data (e.g., temperature data) via wireless transmission from the sensor 1126. Appx110. By receiving this data, monitor 1114 falls within the scope of wireless tracking device, as construed by the Board, because it monitors shipping conditions, such as temperature readings, via sensors 1126. *See, e.g.*, Appx93-94, Appx98, Appx101, Appx103, Appx106, Appx110-111.

Additionally, the Board determined that, “[a]lthough position information and shipping condition information are not the same, the specification does not preclude that shipping condition information may be based on location,” Appx218. IpVenture did not challenge this finding of the Board. Thus, monitor 1114 also monitors shipping condition because monitor 1114 may include “a GPS receiver for receiving location data from a plurality of GPS satellites,” Appx110, and GPS information includes information for identifying direction of travel, speed, acceleration, etc., each of which the ’165 patent explicitly

describes as shipping condition information. Appx476, 5:26-30; Appx84-85. Similarly, monitor 1114 provides environmental condition information, which is a form of shipping condition information, as the '165 patent describes excessive acceleration as an “environmental violation.” *See, e.g.*, Appx9, n. 5, Appx482, 17:56-59, 17:39-42. Thus, monitor 1114 itself also monitors both position and shipping condition information.

The Petition also explains that sensors 1126 are capable of monitoring position information in addition to shipping condition information. As described in the Petition, explained by FedEx's expert, and reinforced in FedEx's reply brief, *Richards* discloses that “sensors 1126 can be designed to monitor **any type of status**” Appx1142, ¶ [0129] (emphasis added); Appx110; Appx1455; Appx347. This includes position information, specifically, “physical presence.” Appx109-11; Appx1135, ¶ [0020]; Appx1656, l. 4-Appx1658, l. 14. In contrast to IpVenture's allegations, Br. 18, *Richards* also discloses a sensor 1126 that provides “position information” pertaining to position of the claimed wireless tracking device. Appx109; Appx1656, ll. 4-21 (explaining that “physical presence in particular is a position

indication.”). Thus, sensors 1126 also monitor both position and shipping condition information.

Richards’ disclosure therefore stands in direct conflict with IpVenture’s allegation that monitor 1114 cannot monitor shipping condition information and sensors 1126 cannot monitor position information. Thus, even if the broadest reasonable interpretation of wireless tracking device permitted IpVenture’s single physical unit limitation, each of monitor 1114 and sensors 1126 are individually “capable of monitoring both position and shipping conditions,” and *Richards* still anticipates claims 1, 13, and 30.

c. *Richards* Discloses a Wireless Tracking Device “Within or Affixed” to a Package

Substantial evidence also supports the Board’s conclusion that *Richards* discloses a “wireless tracking device” that is “within or affixed to [a] package.”¹ As recognized by IpVenture, the Board construed

¹ Notably, while IpVenture suggests that all of claims 1, 13, and 30 require a wireless tracking device “within or affixed” to a package, only claim 1 includes this requirement. Claims 13 and 30 include “within or affixed” language only in the preamble, which, here, is not limiting. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) (preamble not limiting if body of claim fully sets forth invention); *see also Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*,

package as “a physical item that is capable of being shipped.”

Appx213-215; Br. 19. The Petition, supported by its expert, explained that “[t]he cargo 1134 and the structure 1116 are both physical items that are capable of being shipped, and thus are ‘packages.’”

Appx109-110; Appx1457, ¶ 46. *Richards* discloses “monitor 1114” can be attached to structure 1116, and sensors 1126 can be attached to cargo 1134 within structure 1116. Appx110; Appx1141-1142, ¶¶ [0128]-[0129], [0136]. Thus, monitor 1114 and sensors 1126 are “within or affixed” to a package, namely cargo 1134 and the structure 1116.

Again, however, IpVenture attempts to extend its single physical unit argument even further by alleging that the wireless tracking device disclosed by *Richards* cannot be “‘within or affixed to’ the package” because monitor 1114 is depicted as being attached to structure 1116, while sensors 1126 are depicted as being attached to cargo 1134 within structure 1116. Br. 18-21. Specifically, based on its argument that monitor 1114 cannot monitor shipping condition

289 F.3d 801, 808 (Fed. Cir. 2002) (preamble not limiting when it recites only a purpose or intended use of the invention, and the remaining limitations recite a structurally complete invention).

information and sensors 1126 cannot monitor position information, discussed *supra* Section V(B)(2)(b)(ii), IpVenture alleges that monitor 1114 and sensors 1126 cannot constitute a wireless tracking device that is “‘within or affixed to’ [a] package” because they are “physically separate device[s]” attached to different alleged “packages.” Br. 18-21. IpVenture’s argument fails for several reasons.

For example, as discussed above, the broadest reasonable interpretation of “wireless tracking device” is not limited to devices where all components are contained in a single physical unit. There is similarly no requirement that both monitor 1114 and sensors 1126 both be attached to a single package. As the Board noted in its Decision on Rehearing, “[n]o evidence is cited to support [IpVenture’s] interpretation, nor was any such argument or evidence identified during trial.” Appx35. Thus, *Richards* discloses a “wireless tracking device” that is “within or affixed” to a package if either one of monitor 1114 or sensors 1126 is attached to a package. Appx35.

But even if IpVenture’s additional requirement were read into the broadest reasonable interpretation of wireless tracking device, *Richards* discloses embodiments where both monitor 1114 and sensors 1126 are

“within or affixed” to a package, such as structure 1116. As IpVenture notes, *Richards* discloses cargo 1134 found within structure 1116. Br. 20; Appx1142, ¶ [0136]. Thus, where monitor 1114 is “attached” to structure 1116, and sensors 1126 are attached to cargo 1134 “within” structure 1116, *Richards* discloses monitor 1114 and sensors 1126 being “within or affixed” a package. *See, e.g.*, Appx1119.

Also, IpVenture ignores that Figure 11 of *Richards* unambiguously identifies structure 1116 as cargo 1134. Appx1119; *see also* Appx1643, ll. 3-15. *Richards* therefore clearly considers structure 1116 an example of cargo 1134 to which monitor 1114 is attached and to which a sensor 1126 can also be attached. Indeed, as shown in Figure 11, multiple sensors 1126 are within structure 1116. Appx1119. Thus, in contrast to IpVenture’s allegations, *Richards* supports both monitor 1114 and sensors 1126 being “within or affixed” to cargo 1134. *In re Gleave*, 560 F.3d at 1336 (“Certainly where the claims themselves do not require a particular activity, we have no call to require something more from the anticipating reference.”).

Finally, as discussed *supra* Section V(B)(2)(b)(ii), both monitor 1114 and sensors 1126 individually constitute the claimed

wireless tracking device. *Richards* discloses “monitor 1114” can be attached to structure 1116, which is a physical item capable of being shipped, and thus is a “package” under the Board’s construction. *See, e.g.*, Appx1119. Similarly, sensors 1126 are attached to cargo 1134, which are physical items capable of being shipped, and thus “packages” under the Board’s construction. *See, e.g., Id.*

Thus, substantial evidence supports the Board’s determination that *Richards* discloses a wireless tracking device “within or affixed to the package.” Moreover, even if the broadest reasonable interpretation permitted IpVenture to further limit the wireless tracking device to a single physical unit, *Richards* discloses multiple scenarios where monitor 1114 and sensors 1126 meet IpVenture’s additional requirements.

3. The Record Below Confirms the Board Applied the Same Claim Construction for Wireless Tracking Device Throughout the Proceeding, Refuting IpVenture’s Allegation that the Board Broadened its Construction After Institution

According to IpVenture, the Board engaged in “claim construction gymnastics” to find that monitor 1114 and sensors 1126 act together to disclose the claimed “wireless tracking device,” all in an effort to

“artificially maintain an anticipation rejection over *Richards*.” Br. 16, 21-24. But a review of the record below disproves IpVenture’s suggestion that the Board changed its construction of “wireless tracking device” during the proceeding, or that IpVenture was somehow left unaware of the Board’s construction until the Final Written Decision.

Rather, to begin the proceeding, the parties offered competing constructions for “wireless tracking device,” and the Board adopted IpVenture’s proposed construction in its Institution Decision:

Accordingly, we adopt IpVenture’s proposed construction and construe “wireless tracking device” as “a device that is capable of monitoring both position and shipping conditions, and capable of wirelessly communicating with another device.”²

Appx216. Indeed, in its Petition, FedEx proposed a construction requiring the wireless tracking device to use sensors to monitor packages. Appx83-84. In the Institution Decision, however, the Board ruled that requiring the wireless tracking device to use “sensors” was

² Although the ’165 patent claims may require access to or receipt of both position and shipping condition information, Appellant maintains that, under the broadest reasonable interpretation standard and in light of the specification, the “wireless tracking device” of claims 1, 13, and 30 more broadly monitor position *and/or* shipping conditions. Appx83-84. Regardless, as the Board confirmed, *Richards* anticipates the ’165 patent claims under the Board’s construction. Appx19-20.

too limiting under the broadest reasonable interpretation of the claims. Appx215-216. Thus, monitoring could be performed, according to the Board, without using sensors and instead by using another device.

Accordingly, at institution, the Board considered the Petition's arguments concerning monitor 1114 and sensors 1126 according to IpVenture's claim construction for wireless tracking device. And, in doing so, the Board found a reasonable likelihood that *Richards* anticipated claims 1, 13, and 30. Appx222-225. The Board therefore made clear at institution that the claimed wireless tracking device may comprise multiple, physically distinct devices.

Nonetheless, IpVenture argued in its Patent Owner Response that the Board incorrectly applied IpVenture's claim construction—just as it does here, down to the same argument headings—when it found the monitor 1114 and sensors 1126 of *Richards* disclose the claimed wireless tracking device. Appx289-294; Br. 17-21. Thus, it should have come as no surprise when the Board confirmed in its Final Written Decision that the claims have no such requirement:

Contrary to IpVenture's position, however, nothing in the claim language itself compels a conclusion that the recited wireless tracking device must be a single physical unit. In addition, IpVenture was unable to identify any supporting

evidence in the specification for such a limitation. *See* Tr. 20:20–21:6. Nor did IpVenture offer supporting expert testimony.

Appx9-10 (citing Appx397-398). Still, IpVenture repeated its single physical unit argument in a Request for Reconsideration. Appx429-431. In response, the Board again rejected IpVenture’s arguments and went further by preemptively refuting the very “no notice” arguments IpVenture now brings before this Court:

Further, IpVenture ignores that it had ample notice of, and opportunity to respond to, these contentions regarding monitor 1114 and sensors 1126 of Richards because we instituted trial relying specifically on those contentions, as explained in the Decision on Institution. Dec. Inst. 16. Thus, IpVenture was not prejudiced or denied due process because it had sufficient notice before filing its Patent Owner Response.

Appx32 (citing Appx223).

The record below clearly shows that the Board never changed its construction of “wireless tracking device” during the proceeding. The fact that IpVenture makes the very same arguments to this Court that it did to the Board following institution makes this clear, removing any doubt that IpVenture simply disagrees with the Board’s factual analysis. Appx289-294; Br. 17-21. In contrast to IpVenture’s Opening Brief arguments, this is not “legal error,” nor was IpVenture provided

“no notice” of the Board’s claim construction for wireless tracking device.

C. The Board Correctly Concluded that Claim 23 is Unpatentable as Obvious over *Richards* and *Zhou*

The Board found dependent claim 23 unpatentable as obvious under 35 U.S.C. § 103(a) over *Richards* in view of *Zhou*. In response, IpVenture argues that the Board relied on an overly broad construction of “portable by a person” under the broadest reasonable interpretation of the claim, then recycles its single physical unit arguments associated the wireless tracking device, discussed *supra* Section V(B)(2). The Board properly rejected these arguments in both the Final Written Decision and Decision Denying Rehearing. The Court should reject these arguments now.

1. The Board Properly Construed “Portable by a Person” Using the Broadest Reasonable Interpretation

Dependent claim 23 depends indirectly from independent claim 13 and recites the additional limitation, “wherein the package is an individual package that is portable by a person.” Appx483, 19:40–41. For this phrase, in its Institution Decision, the Board adopted FedEx’s proposed construction: “an individual package that is capable of being

moved by a person.” Appx221. The Board confirmed this construction in its Final Written Decision. Appx12-13. While IpVenture offered variations of an alternative construction during the proceeding, each of which excluded moving a package using mechanical assistance (*see* Appx25, Appx315), the Board confirmed that the Institution Decision properly construed “portable by a person” under the broadest reasonable construction in light of the ’165 patent specification. Appx12-13.

For example, the Board observed that “[t]he specification does not expressly define ‘portable by a person,’ nor does the specification clearly disclaim a portion of the term’s full scope.” Appx221. While IpVenture now argues again that the Board should have limited the construction to packages “a person can carry in an unaided manner,” so as to preclude packages of any size, weight, and shape from being considered “portable,” Br. 28-29, the Board already explained that “the specification does not discuss size limitations or whether the use of mechanical assistance is precluded.” Appx13. The Board further observed that:

IpVenture failed to present any evidence that a skilled artisan would interpret “portable by a person” to exclude all

forms of mechanical assistance—in fact, the only pertinent evidence in the record indicates otherwise (see Ex. 1011 ¶¶ 35–36 (Declaration of Dr. Jason L. Hill)).

Appx12 (citing Appx1452-1453, ¶¶ 35–36). While IpVenture argues that it “rebutted” FedEx’s expert by virtue of citing a 1989 dictionary entry for “portable,” Br. 28-29, 31 n. 7, the listed dictionary definitions include “capable of being moved from place to place,” directly supporting the Board’s construction. Appx1937. As the Board also noted, IpVenture provided no expert testimony at all, much less testimony regarding how a person of ordinary skill in the art would interpret “portable by a person.” Appx12.

Absent any special definitions, claim terms are generally given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the patent’s disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). FedEx’s expert explained that one of ordinary skill in the art would have understood the phrase “an individual package that is portable by a person” to include “all reasonable interpretations of the phrase, including packages of all sizes, weights and shapes, capable of being moved by a person, with or without all types of mechanical assistance.”

Appx12; Appx1453. Thus, given the '165 patent does not define “portable by a person” or clearly disclaim a portion of the term’s full scope, the Board properly rejected IpVenture’s narrower construction of “an individual package that is capable of being carried by a person” in favor of the broadest reasonable interpretation, “an individual package that is capable of being moved by a person.” *In re Translogic*, 504 F.3d at 1257.

Moreover, IpVenture’s proposed construction would render claim 23 indefinite. IpVenture submits that “an individual package that is portable by a person” should become construed to mean “an individual package that is capable of being carried by a person.” Br. 27. But under such a construction, where the size of the package is undefined but remains determinative of infringement, an accused product “might infringe or not dependent on its usage in changing circumstances.” *Geneva Pharms., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1384 (Fed. Cir. 2003). As this Court has held, such situations are “the epitome of indefiniteness.” *Id.*

The Supreme Court has also explained that “a patent must be precise enough to afford clear notice of what is claimed, thereby

‘apprising the public of what is still open to them.’” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014) (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996).)

Without that precision, “there would be ‘[a] zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims.” *Id.* (quoting *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942)). To avoid this “zone of uncertainty,” the Supreme Court held that “a patent is invalid for indefiniteness if its claims, read in light of the specification . . . and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Id.* at 2124. Thus, because the ’165 patent does not define “portable by a person” or otherwise place any limits on the size, weight, or shape of what packages are “portable,” IpVenture’s proposed construction would render claim 23 indefinite.

Moreover, a party wishing to confine the scope of a claim term must identify statements made in the written description that can in turn be drawn in to justify narrowing the property right. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998)

("[w]ithout any claim term that is susceptible of clarification by the written description, there is no legitimate way to narrow the property right"); *cf. NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1301-02 (Fed. Cir. 2005) (A party wishing to use statements in written description to confine the scope of a claim must also point to term or terms in the claim with which to draw in those statements). Here, IpVenture never identified support in its patent for a narrow construction that would confine "portable by a person" to packages of only a certain size or smaller because no such written description exists. Moreover, IpVenture added claim 23 during prosecution, so the claim itself cannot be used to narrow the scope of itself as though it was a part of the as-filed application. Thus, applying the broadest reasonable interpretation standard, the Board properly concluded that "portable by a person" does not exclude items of a particular size, include those of larger size that may require some form of mechanical assistance to move them.

Regardless, and even if the Court concludes that the Board failed to construe claim 23 in the narrow way IpVenture asserts, *Richards* discloses cargo of all sizes (Appx1142, ¶ [0129]) and, importantly, the

Board canceled claim 23 under § 103 as being obvious in view of the combination of *Richards* and *Zhou*. Appx25-27.

2. “Portable by a Person” Only Required Construction to the Extent Necessary to Resolve the Controversy Presented

By determining that *Richards* discloses cargo such as a refrigerator and crate qualify as “portable by a person,” the Board properly found that *Richards* discloses “an individual package that is capable of being moved by a person.” As the Board explained to IpVenture, terms in controversy need only be construed “to the extent necessary to resolve the controversy.” Appx6 (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)); *see also Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011). Thus, the Board rightfully followed *Vivid Techs.* and declined to specifically rule on whether “substantially larger objects requiring tremendous mechanical assistance to move (e.g., a cargo ship) qualify as being portable by a person.” Appx13.

Nonetheless, IpVenture criticizes the Board and its reliance on *Vivid Techs.*, asserting the claim term “portable by a person” should have been construed narrowly to eliminate trailer 1116 in *Richards*.

Br. 30-31. Specifically, IpVenture alleges that because monitor 1114 is attached to trailer 1116, the Board is required to explicitly determine whether trailer 1116 is “portable by a person.” Br. 32. IpVenture’s entire argument in this regard, however, rests on its failed single physical device argument discussed *supra* Section V(B)(2).

As discussed, *supra* Section V(B)(2), substantial evidence supports the Board’s determination that monitor 1114 and sensors 1126 in *Richards* disclose the claimed wireless tracking device. And with respect to dependent claim 23, *Richards* discloses that sensors 1126 may be affixed to cargo such as a refrigerator or a crate, and refrigerators and crates are “portable by a person,” as properly construed. Appx13, Appx34 (citing FedEx’s expert at Appx1474, ¶ 80). IpVenture has never disputed the Board’s findings regarding the refrigerator/crate of *Richards*. Appx34-35. Thus, IpVenture’s allegation that the Board “partially skirted” whether *Richards* discloses a wireless tracking device “within or affixed” to a package that is “portable by a person” falls flat.

Accordingly, the Board was not required to determine whether “substantially larger objects requiring tremendous mechanical assistance to move (e.g., a cargo ship) qualify as being portable by a

person” because “such determinations are unnecessary for purposes of this Decision.” Appx13. Indeed, as this Court has observed, “[s]uch an endeavor could proceed ad infinitum, as every word—whether a claim term itself, or the words a court uses to construe a claim term—is susceptible to further definition, elucidation, and explanation.” *GPNE Corp. v. Apple Inc.*, No. 2015-1825, 2016 WL 4073323, at *5 (Fed. Cir. Aug. 1, 2016) (citing *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1318 (Fed. Cir. 2016)). Thus, given that the Board found that *Richards* teaches a wireless tracking device within or affixed to a package that is “portable by a person,” the Board properly declined to specifically determine whether trailer 1116 qualifies as being portable by a person. Appx13; Appx34-35.

3. The Board Properly Applied BRI to Reject IpVenture’s Single Physical Device Arguments, and The Record Below Confirms the Board Applied the Same Claim Construction for Wireless Tracking Device Throughout the Proceeding

Throughout the proceeding, the Board found that monitor 1114 and sensors 1126 of *Richards* together disclose a “wireless tracking device” that is “within or affixed” to a package that is “portable by a person.” Appx35, Appx225-26. Nevertheless, IpVenture claims that the

Board fabricated a “new theory” in its Final Written Decision when confirming that, because the claims do not include a single physical unit requirement, *Richards* need not disclose both monitor 1114 and sensor 1126 affixed to the same package to disclose dependent claim 23. Br. 37-38. IpVenture’s own briefing in the proceeding below disproves IpVenture’s allegation that the Board injected a “new theory” of obviousness during the proceeding, or that IpVenture was somehow left unaware of the Board’s application of *Richards* and *Zhou* until the Final Written Decision.

The Board adopted IpVenture’s proposed construction for “wireless tracking device” in its Institution Decision, over the objection of FedEx, and applied that construction throughout the proceeding. Appx216; Appx9-10. Finding that broadest reasonable interpretation of “wireless tracking device” is not limited to devices where all components are contained in a single physical unit, the Board found monitor 1114 and sensors 1126 comprise a device “capable of monitoring both position and shipping information” because, “[a]s FedEx asserts, *Richards* discloses that monitor 1114 works in conjunction with sensors 1126, which are affixed to cargo 1134, to monitor position information and

environmental/shipping conditions information, such as temperature.”

Appx16-17 (citing Appx1141-1143, ¶¶ 128–29, 143; Appx1122).

Therefore, the Board maintained its claim construction and confirmed in its Decision on Rehearing that claim 23 does not require that “the wireless tracking devices be wholly and exclusively affixed to the recited package” because IpVenture had not demonstrated that claim 23 “precludes the wireless tracking device from being partially affixed to the package.” Appx35.

IpVenture latches on to the phrase “partially affixed” to suggest the Board retroactively invented a new theory to interpret the claims. Br. 37. But in the Decision on Rehearing itself, the Board observed that it had already articulated this interpretation of the claims. Appx35, n. 5 (explaining that the Board had previously considered and rejected IpVenture’s single physical unit argument). Thus, in contrast to IpVenture’s allegation, the Board provided no “last minute, *sua sponte*, interpretation of the limitations of the wireless tracking device.” Br. 37. Rather, IpVenture was given every opportunity to address the Board’s findings on this issue:

IpVenture ignores that it had ample notice of, and opportunity to respond to, these contentions regarding

monitor 1114 and sensors 1126 of Richards because we instituted trial relying specifically on those contentions, as explained in the Decision on Institution. Dec. Inst. 16. Thus, IpVenture was not prejudiced or denied due process because it had sufficient notice before filing its Patent Owner Response.

Appx32.

Accordingly, IpVenture's reliance on *SAS Institute, Inc. v. ComplementSoft, LLC*, 825 F.3d 1341 (Fed. Cir. 2016) is misplaced. Br. 37. In *SAS*, the Board newly construed a dispositive claim term in its Final Written Decision. *SAS*, 825 F.3d at 1346. Indeed, in *SAS*, the Board's construction in the Final Written Decision varied significantly from its initial interpretation of the term, and neither party had argued for the new construction during the proceeding. *Id.* at 1351. Thus, the Board's construction constituted a "moving target" that the parties could not have anticipated. *Id.* A very different situation presents itself here. Here, the Board provided its construction for "wireless tracking device" in its Institution Decision, the parties exchanged construction arguments on those terms at every stage of briefing, and the Board maintained its construction in the Final Written Decision (and again in its Decision on Rehearing). Appx215-16, Appx7-10, Appx33-36.

And to the extent the Board clarified its construction of wireless tracking device in response to IpVenture's arguments, this is not "legal error" either. As the Court explained in *SAS*, the concern "is not that the Board adopted a construction in its final written decision, as the Board is free to do, but that the Board 'change[d] theories in midstream.'" *SAS*, 825 F.3d at 1351 (citing *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1080 (Fed. Cir. 2015)). The Board's repeated explanations to IpVenture that "wireless tracking device" should not be construed to require a single physical unit (i.e., precluding monitor 1114 and sensors 1126, which are physically separate, from being considered a "wireless tracking device") dispel any notion that the Board injected a "new theory" for interpreting wireless tracking device in its Decision on Rehearing.

4. Claim 23 is Obvious over *Richards* and *Zhou*

The Board found claim 23 obvious under 35 U.S.C. § 103(a) over *Richards* in view of *Zhou*. Appx25-27. In the petition, FedEx pinpoints specific disclosures in *Richards* and *Zhou* that teaches each limitation of dependent claim 23. Appx129. For example, *Richards* discloses cargo of all sizes, including "individual cargo items can be large items such as a

refrigerator or a number of smaller items on a pallet or in a crate.”

Appx129 (citing Appx1142, ¶ [0129]). Supported by its expert, FedEx further explained:

A refrigerator, let alone items smaller than a refrigerator, are portable by a person. Structure 1116 is also portable by a person (e.g., a driver). A refrigerator (and other types of cargo disclosed in Richards) and structure 1116 are both portable by a person because they are both capable of being moved by a person. Ex. 1011, ¶ 80. A refrigerator, for example, could be lifted by a person or placed into a truck driven by a person. *Id.*

Appx129 (citing Appx1474, ¶ 80). Based on the evidence presented, including Dr. Hill’s unrebutted testimony, the Board concluded that a refrigerator and a crate, as disclosed in *Richards*, qualify as portable by a person within the meaning of claim 23. Appx26. Thus, *Richards* and *Zhou* disclose a wireless tracking device affixed to a package that is portable by a person, rendering claim 23 obvious.

While IpVenture suggests that *Zhou* is inconsequential to the Board finding claim 23 unpatentable, Br. 8, 15, n. 1, that is not the case. Because the ground of unpatentability in question is obviousness, the relevant inquiry is not, as IpVenture suggests, whether the exact embodiment expressly disclosed in *Richards* satisfies the limitations of the challenged claim. Rather, the proper inquiry is whether *Richards*

and *Zhou*, as a whole, teach or suggest to a person of ordinary skill a wireless tracking device affixed to a package that is portable by a person, taking into account the inferences and creative steps that such an artisan would employ. *See Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013) (quoting *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)). Using the correct analysis, the Board found claim 23 obvious under 35 U.S.C. 103(a) over *Richards* in view of *Zhou*. Appx25-27.

D. The PTAB Properly Applied the BRI Standard from 37 C.F.R. § 42.100(b), a PTO Regulation that Congress Authorized the PTO to Promulgate, and the Presumption of Validity in 35 U.S.C. § 282 Does Not Apply to IPR Proceedings

IpVenture proclaims the Board should not be permitted to apply the broadest reasonable interpretation standard when construing claims of issued patents. IpVenture asserts, for the first time in this appeal, that the Board's application of the broadest reasonable interpretation standard "emasculat[ed] the presumption of validity ... under 35 U.S.C. § 282." Br. 38-41. And, rebuffing the Supreme Court's teachings in *Cuozzo Speed Techs., LLC v. Lee*, 136 S.Ct. 2131 (2016), IpVenture contends that because issued patents are entitled to a

presumption of validity under 35 U.S.C. § 282, the U.S. Patent and Trademark Office exceeded its authority under § 2 of the America Invents Act (“AIA”) by promulgating 37 C.F.R. § 42.100(b) requiring the Board to apply the broadest reasonable interpretation standard to unexpired patent claims. The Court should reject IpVenture’s argument because IpVenture waived any right to make this argument, the presumption of validity does not apply here, and, even if the presumption did apply, the Board properly rejected IpVenture’s proposed construction of the only disputed term.

1. IpVenture Waived Any Right to Assert BRI Should Not Be Used in IPR Proceedings

The Court should summarily dismiss this argument because IpVenture never raised this argument below before the Board. This Court does not, as a general rule, decide issues on appeal that a party failed to raise in the proceedings below. *See Synan v. Merit Sys. Prot. Bd.*, 765 F.2d 1099, 1101 (Fed. Cir. 1985); *see also Boggs v. West*, 188 F.3d 1335, 1337-38 (1999) (court declined to address statutory interpretation argument raised for the first time on appeal from Court of Appeals for Veterans Claims). None of the exemplary circumstances this Court articulated in *Forshey v. Principi*, 284 F.3d 1335, 1353-54

(Fed. Cir. 2002), for deviating from this general rule apply in this case. Nor, as the record below reveals, has IpVenture articulated any circumstances that would justify deviating from the general rule. *See Golden Bridge Tech., Inc. v. Nokia, Inc.*, 527 F.3d 1318, 1323 (Fed. Cir. 2008) (court declined to extend *Forshey* examples; appellant provided no other special circumstances that would favor consideration of new argument on appeal in the first instance). Thus, by not raising this argument before the Board, IpVenture waived the opportunity to make this argument on appeal. *See Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 449-50 (2015) (argument not made to the Board was improper on appeal).

2. The Presumption of Validity Does Not Apply in PTO Proceedings

Although the Supreme Court did not specifically address § 282 in *Cuozzo Speed Techs., LLC v. Lee*, the Supreme Court more broadly addressed the PTO's authority to promulgate rules, including the broadest reasonable interpretation standard in 37 C.F.R. § 42.100(b). The Supreme Court, agreeing with this Court, explained that 35 U.S.C. § 316(a)(4) contains a provision granting to the PTO authority to issue "regulations ... establishing and governing inter partes review," without

any particular limitation, and this gives the PTO “the legal authority to issue its broadest reasonable construction regulation.” 136 S.Ct. at 2142. The Supreme Court also found the broadest reasonable interpretation regulation to be a reasonable exercise of the PTO’s rulemaking authority under § 316(a)(4), rejecting Cuozzo’s arguments that the PTO’s broadest reasonable interpretation standard is unfair. The Supreme Court would not have found the broadest reasonable interpretation regulation to be a “reasonable exercise” of the PTO’s rulemaking authority” if, as IpVenture claims, the regulation “emasculat[es] the presumption of validity.”

Relying on a case that originated from a district court action for infringement, *Microsoft Corp. v. i4i Limited Partnership*, 564 U.S. 91, 131 S.Ct. 2238 (2011), IpVenture argues that “[t]o adjudicate the validity of an issued patent, the Patent Office must consider the actual scope of the patent” and by considering “fictitious scope created by [broadest reasonable interpretation], the [PTO] ignores the presumption of validity.” Br. 40. But IpVenture ignores a basic principle here: proceedings before the PTO are distinguishable from proceedings in federal district courts on issued patents, and § 282 does not apply to

proceedings in the PTO. *In re Etter*, 756 F.2d 852 (Fed. Cir. 1985) (en banc) (with extensive analysis Court rejected argument that § 282 applied to reexamination proceedings). There is no distinction between reexaminations, like that at issue in *In re Etter*, and this case involving an *inter partes* review, “the focus of both is on curing defects which occurred during a proceeding in the PTO, which was responsible for original issuance of the patent.” *Id.* at 858. The Supreme Court and this Court have already reviewed the statutes, legislative history, regulations, and case law that compels the view that § 282 is not applicable to claims subject to IPR proceedings, just like the claims in *In re Etter* that were subject to reexamination. *See In re Cuozzo Speed Techs.*, 793 F.3d 1268 (2015) *aff’d Cuozzo Speed Techs., LLC v. Lee*, 136 S.Ct. 2131 (Fed. Cir. 2016).

3. Even if the *Phillips* Standard Applied, IpVenture Asserts the Wrong Construction of Only One Claim Term “An Individual Package That is Portable by a Person,” and IpVenture’s Proposed Construction of that Term was Properly Rejected by the Board as Ambiguous; The Proposed Construction is also Not Supported by the Specification

Lastly, IpVenture has waived all but the one claim construction issue with the claim term “an individual package that is portable by a

person.” *See Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 694 (Fed. Cir. 2008). And IpVenture has failed to explain how application of the *Phillips* standard would have required the Board to construe this term to mean “an individual package that is capable of being carried by a person” as opposed to “an individual package that is capable of being moved by a person.” Indeed, the Board specifically cited *Phillips* when rejecting IpVenture’s very similar proposed construction of “an individual package that is easily carried by a person” in the Institution Decision because (i) it improperly relied on a 2014 dictionary definition and (ii) the phrase “easily carried” injects further ambiguity into the claim. Appx221. IpVenture’s proposed substitution of “capable of being carried” for “easily carried” fares no better. Appx315; Br. 27. Besides, the ’165 patent specification—the single best guide to the meaning of claim terms—does not include “an expression of manifest exclusion or restriction demonstrating an intent to limit the term “an individual package that is portable by a person” to only packages “capable of being carried” by a person. *See Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002).

VI. CONCLUSION

IpVenture identifies no persuasive basis for disturbing the Board's Final Written Decision invalidating claims 1-30. FedEx therefore respectfully requests that the Court affirm the Board's holding that the claims of the '165 patent are unpatentable.

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Respectfully submitted,

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/s/ Michael V. Young, Sr.

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October 6, 2016

CERTIFICATE OF SERVICE

I hereby certify that I served a copy of the foregoing BRIEF FOR APPELLEE FEDEX CORPORATION on counsel of record on October 6, 2016, by Electronic Means (the Court's CM/ECF).

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